

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P214742

Luminaire Tested: **ARCH-AF24-30-D-U-T3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214742
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-30-D-U-T3-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3980 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

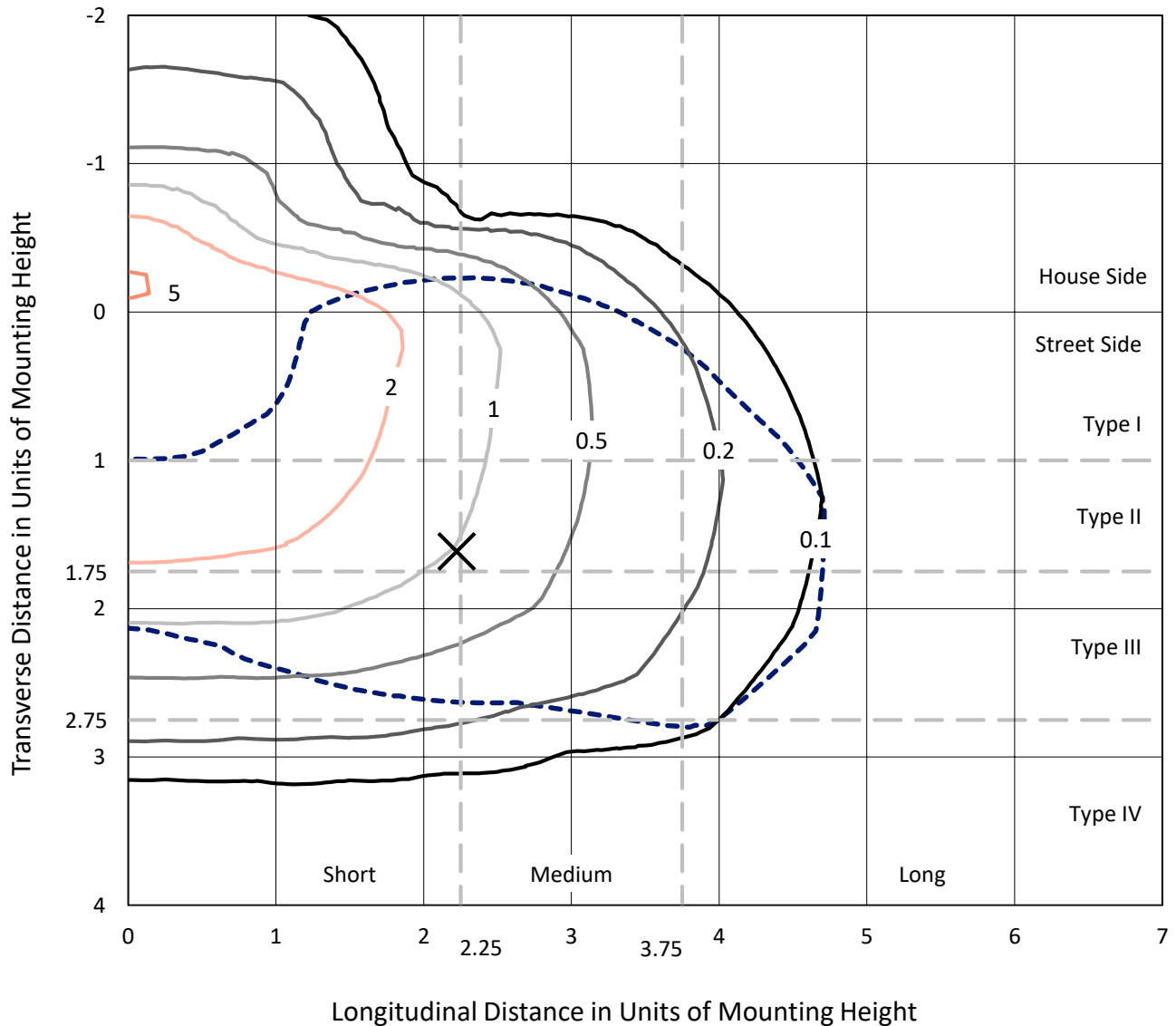
Input Watts (W): 31
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

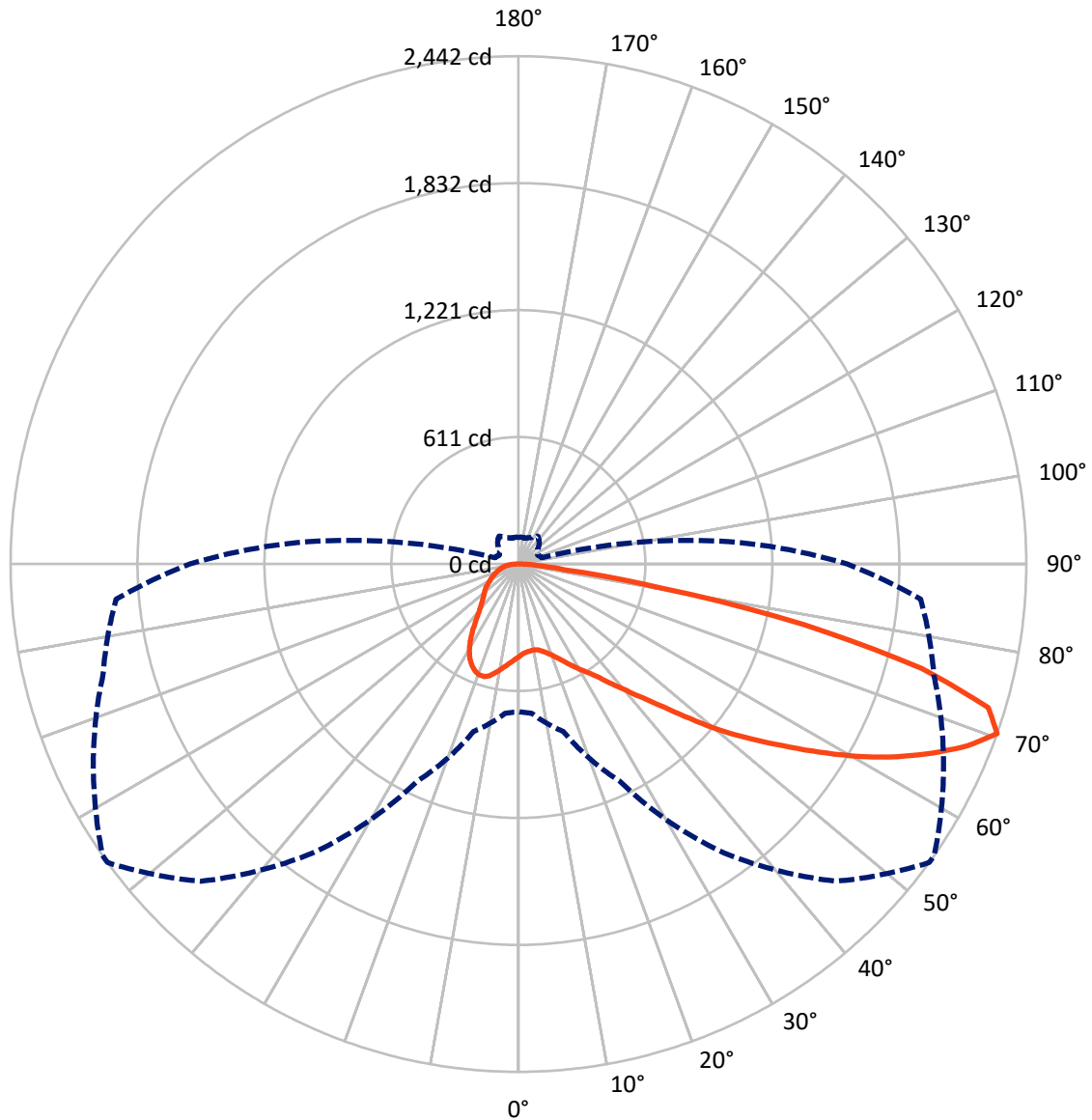
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.2 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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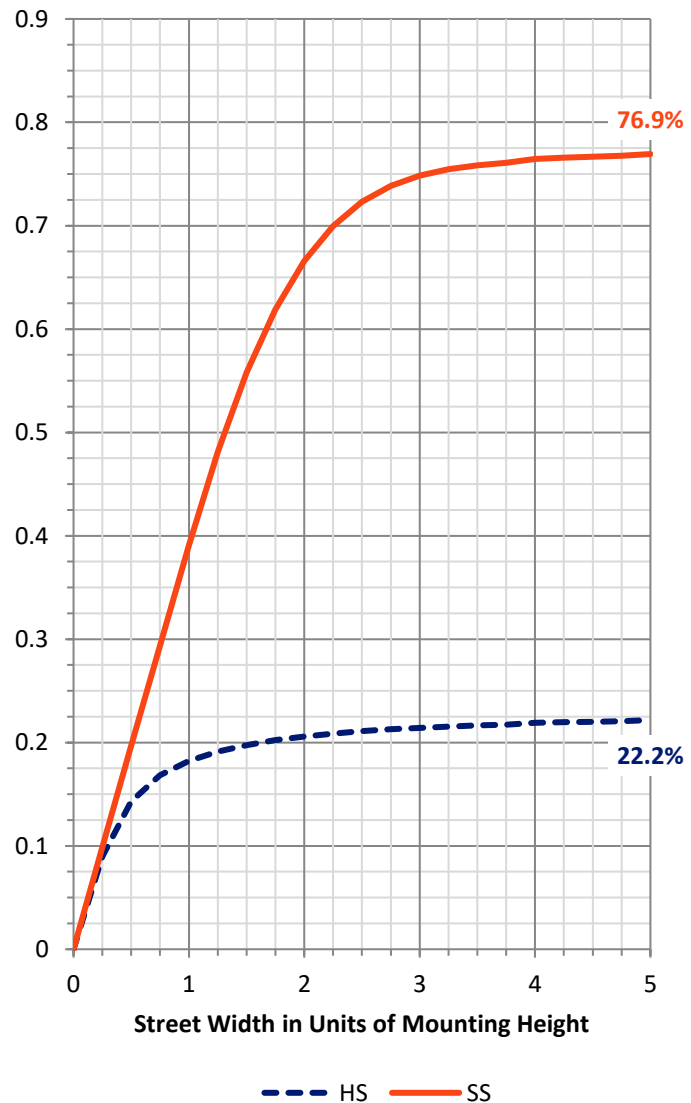
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	902.6	0.0	902.6
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	3077.4	0.0	3077.4
	% Fixture	77.3	0.0	77.3
Total	Lumens	3980.0	0.0	3980.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.7	1.1
10°-20°	139.6	3.5
20°-30°	242.6	6.1
30°-40°	354.5	8.9
40°-50°	556.4	14.0
50°-60°	855.6	21.5
60°-70°	1045.3	26.3
70°-80°	648.1	16.3
80°-90°	94.2	2.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3980.0	100.0
0°-180°	3980.0	100.0

Coefficient of Utilization



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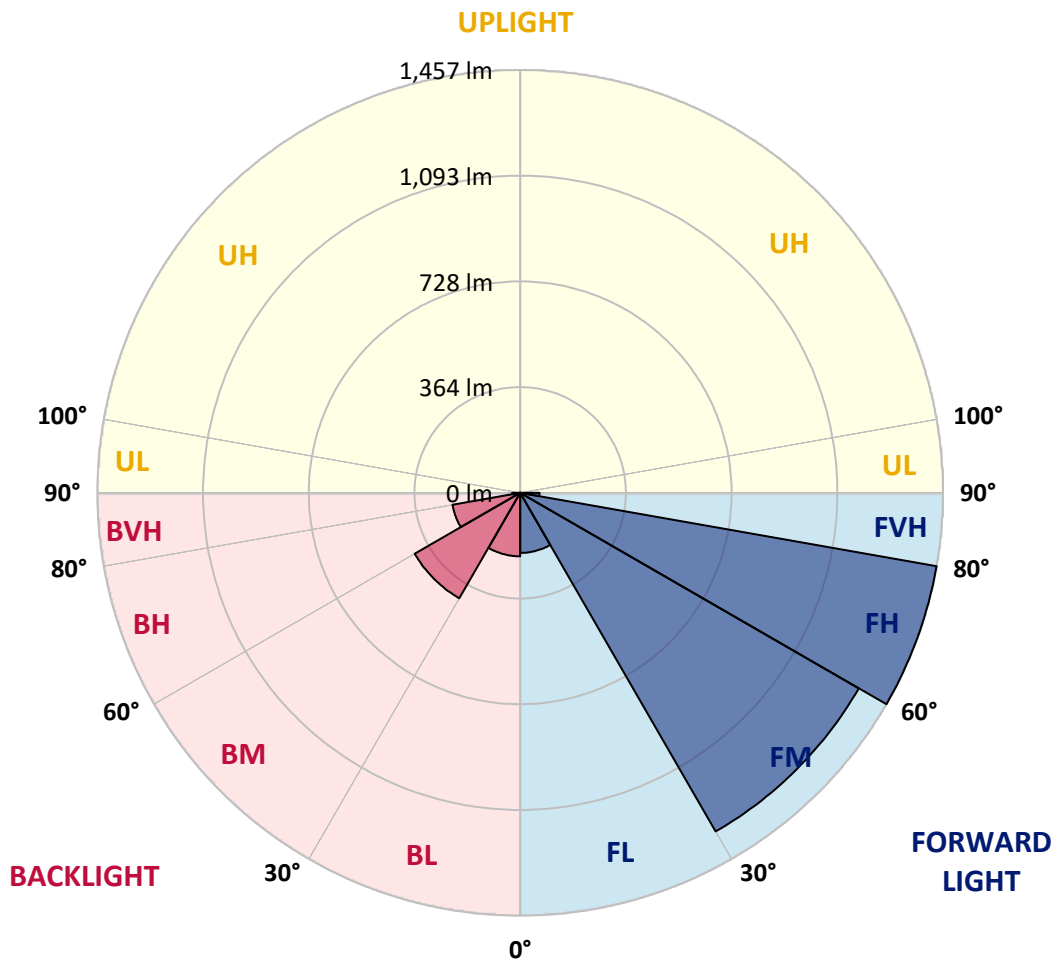
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	207.1	5.2			
FM	(30°-60°)	1347.1	33.8			
FH	(60°-80°)	1456.7	36.6			G1/1800
FVH	(80°-90°)	66.5	1.7			G1/100
BL	(0°-30°)	218.8	5.5	B1/500		
BM	(30°-60°)	419.5	10.5	B1/1000		
BH	(60°-80°)	236.7	5.9	B1/500		G1/500
BVH	(80°-90°)	27.7	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3
2.5°	427.8	426.3	426.3	428.5	429.2	431.4	431.4	432.2	434.3	438.0	442.4
5°	414.7	413.9	414.7	417.6	419.0	423.4	424.9	425.6	430.0	435.8	442.4
7.5°	401.6	400.8	402.3	406.7	411.0	417.6	421.2	422.0	428.5	436.5	445.3
10°	397.2	396.5	398.6	402.3	406.7	413.9	419.8	420.5	430.0	439.5	451.8
12.5°	403.0	402.3	404.5	408.1	412.5	417.6	424.1	424.9	437.3	449.7	462.8
15°	417.6	417.6	418.3	420.5	424.9	429.2	435.1	435.8	448.9	463.5	476.6
17.5°	440.2	438.7	438.7	438.0	440.9	443.1	450.4	451.1	465.0	478.1	491.2
20°	467.9	467.1	464.2	460.6	459.9	461.3	468.6	469.3	483.2	494.1	506.5
22.5°	501.4	502.1	495.6	487.6	483.9	486.1	492.7	493.4	503.6	513.1	524.0
25°	545.9	543.7	534.2	522.5	515.2	515.2	521.8	521.8	531.3	537.1	544.4
27.5°	588.1	583.7	575.0	558.2	546.6	548.8	555.3	555.3	564.1	566.3	569.9
30°	634.0	629.7	618.7	597.6	582.3	580.8	588.9	588.1	599.8	599.1	596.1
32.5°	690.2	688.0	669.7	642.8	622.4	617.3	624.6	625.3	632.6	630.4	620.9
35°	768.9	768.1	751.4	704.0	677.0	667.6	671.9	671.9	677.0	671.2	655.2
37.5°	868.0	869.4	854.9	784.9	747.0	731.0	731.7	731.0	732.4	725.9	709.1
40°	967.1	970.7	970.0	885.5	837.4	809.7	799.5	798.0	801.7	798.7	782.7
42.5°	1097.5	1106.3	1085.9	1009.4	955.4	908.8	881.1	877.4	885.5	889.1	873.8
45°	1233.1	1230.2	1198.1	1142.7	1093.9	1034.1	981.7	975.8	981.7	992.6	976.6
47.5°	1303.8	1301.6	1293.6	1265.9	1258.6	1190.1	1110.7	1105.6	1094.6	1109.9	1091.0
50°	1420.4	1422.6	1389.8	1386.9	1417.5	1379.6	1256.4	1244.7	1225.1	1237.5	1221.4
52.5°	1504.9	1495.4	1475.0	1500.5	1596.0	1575.6	1393.4	1388.3	1370.1	1367.2	1359.9
55°	1539.2	1539.2	1542.8	1601.8	1738.1	1711.2	1542.1	1547.2	1522.4	1502.0	1511.5
57.5°	1549.4	1553.7	1585.1	1682.7	1905.0	1816.8	1706.1	1713.4	1677.6	1636.8	1666.7
60°	1499.1	1512.2	1587.3	1728.7	1999.0	1929.1	1878.8	1881.0	1829.2	1769.5	1821.9
62.5°	1370.1	1386.1	1520.2	1747.6	1983.7	2044.2	2042.0	2047.1	1976.4	1902.1	1967.7
65°	1212.0	1228.0	1370.8	1694.4	1972.1	2126.6	2191.4	2205.3	2114.2	2014.3	2058.8
67.5°	979.5	1000.6	1136.2	1515.1	1915.2	2194.3	2331.4	2345.9	2220.6	2072.6	2050.8
70°	709.8	720.0	833.7	1151.5	1683.5	2157.2	2442.1	2441.4	2255.6	2068.3	1941.5
72.5°	341.8	349.8	448.2	714.9	1203.9	1830.7	2362.0	2375.8	2207.5	2004.9	1691.5
75°	140.7	148.7	181.5	301.7	631.8	1209.8	2001.9	2034.7	2004.9	1799.3	1323.5
77.5°	87.5	90.4	106.4	156.0	288.6	564.8	1401.4	1445.9	1588.7	1441.5	873.8
80°	65.6	67.8	79.4	109.3	182.2	208.4	696.0	752.1	962.7	827.2	395.7
82.5°	54.7	55.4	63.4	79.4	123.9	119.5	223.0	248.5	448.9	315.6	136.3
85°	51.0	52.5	56.8	56.8	78.7	75.1	92.6	96.9	130.5	107.9	47.4
87.5°	26.2	24.8	50.3	44.5	40.8	36.4	39.4	42.3	48.8	51.7	21.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3	445.3
2.5°	443.8	446.0	449.7	453.3	457.7	462.8	465.7	469.3	472.2	470.8	470.1
5°	446.0	449.7	457.7	465.0	473.7	483.9	490.5	497.8	503.6	505.0	502.9
7.5°	449.7	456.2	467.1	480.3	491.9	505.0	515.2	525.4	532.7	534.2	534.2
10°	458.4	465.7	480.3	497.8	511.6	525.4	537.1	545.1	551.7	554.6	554.6
12.5°	470.8	479.5	497.0	518.2	533.5	546.6	553.1	556.8	559.7	562.6	563.3
15°	485.4	494.8	516.0	538.6	554.6	561.2	561.2	560.4	560.4	561.9	563.3
17.5°	499.9	510.1	532.0	556.1	566.3	562.6	557.5	555.3	553.9	553.1	555.3
20°	515.2	525.4	547.3	569.9	567.0	551.7	544.4	539.3	534.9	532.7	535.6
22.5°	532.0	541.5	564.1	579.4	557.5	534.2	520.3	512.3	505.0	500.7	503.6
25°	551.7	561.2	583.0	582.3	540.8	508.0	486.1	473.0	465.0	460.6	460.6
27.5°	575.0	583.0	604.2	575.0	517.4	473.0	440.9	428.5	426.3	422.7	422.7
30°	599.1	605.6	623.8	558.2	485.4	427.1	392.1	386.3	387.0	383.3	384.1
32.5°	623.8	630.4	635.5	533.5	443.8	375.3	352.0	347.6	346.9	344.0	341.1
35°	658.8	668.3	636.9	499.9	393.5	332.3	315.6	311.2	306.8	296.6	296.6
37.5°	712.0	722.2	633.3	458.4	341.8	298.8	283.5	277.7	270.4	260.2	256.5
40°	784.9	784.9	625.3	411.8	300.3	271.8	257.3	250.0	242.0	231.8	229.6
42.5°	870.9	850.5	612.9	364.4	269.6	253.6	240.5	232.5	223.0	211.3	209.9
45°	971.5	916.1	595.4	322.1	247.1	242.7	234.7	220.8	204.8	192.4	190.2
47.5°	1069.1	975.1	578.6	292.2	228.1	238.3	231.8	208.4	186.6	169.1	166.9
50°	1176.2	1027.6	559.0	267.5	213.5	235.4	228.1	190.2	166.2	153.8	152.3
52.5°	1283.4	1080.8	537.8	241.2	201.1	229.6	219.4	177.1	165.4	148.7	146.5
55°	1396.3	1142.7	513.1	212.1	186.6	217.9	207.7	176.4	170.5	148.7	143.6
57.5°	1506.4	1211.2	473.0	183.7	170.5	200.4	203.3	172.0	159.6	147.2	141.4
60°	1628.1	1284.1	406.7	159.6	156.7	185.8	197.5	162.5	147.2	142.8	139.9
62.5°	1725.7	1349.7	317.7	142.8	145.0	174.2	190.2	156.7	142.1	138.5	137.7
65°	1768.0	1351.1	228.1	128.3	133.4	163.2	182.9	151.6	137.7	136.3	135.6
67.5°	1723.6	1276.8	160.3	114.4	121.0	153.0	173.4	146.5	133.4	134.1	132.6
70°	1580.0	1120.1	117.3	101.3	109.3	142.1	163.2	139.9	128.3	129.7	127.5
72.5°	1322.0	873.1	94.0	90.4	99.8	130.5	153.0	132.6	120.2	121.0	116.6
75°	976.6	578.6	78.7	80.9	88.9	119.5	139.9	123.2	111.5	108.6	105.7
77.5°	580.8	297.3	64.9	70.7	79.4	106.4	125.3	111.5	102.0	96.9	94.7
80°	239.8	120.2	53.2	59.8	69.2	94.7	110.8	97.7	91.1	86.0	83.1
82.5°	95.5	59.0	42.3	48.8	58.3	82.4	96.9	86.0	79.4	75.8	67.8
85°	36.4	29.2	28.4	34.3	43.7	63.4	80.2	72.1	67.0	57.6	55.4
87.5°	14.6	13.1	13.1	16.8	24.8	40.1	57.6	50.3	52.5	41.5	42.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)